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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,213	10/17/2001	Takeshi Yasumoto	684.3266	4502

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EXAMINER

BRASE, SANDRA L

ART UNIT PAPER NUMBER

2852

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/978,213

Applicant(s)

YASUMOTO ET AL.

Examiner

Sandra L. Brase

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13 and 15-48 is/are rejected.
- 7) ☒ Claim(s) 9-12 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

2. Claims 8, 13 and 15-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8 and 22/1 are duplicates of one another.

On line 2 of claim 13; and on line 2 of claim 44, “!!” could be deleted.

Lines 6-7 of claim 15, are unclear.

On line 2 of claim 17, “currently” could be changed to “correctly”.

On line 4 of claim 32 “the photosensitive member” lacks antecedent basis.

On line 6 of claim 32; on line 2 of claim 35; on line 2 of claim 37; on line 3 of claim 39; and on line 2 of claim 47, “first coupling portion” is unclear since it implies that there are more than one coupling portions and there is not a second coupling contained in the language of the respective claim.

On line 11 of claim 32, “the driver” lacks antecedent basis.

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On line 2 of claim 38, "said hole portion" is unclear as to which hole portion is being claimed, the hole portion of the first coupling portion as defined in claim 37, or the hole portion that is engaged with a center shaft as defined in claim 32.

Claim 46 appears not to further limit claim 32, upon which it is depended, since claim 32 already contained a photosensitive member.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-8, 15-17, 19-22, 30-33, 35-39 and 46-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Azuma et al. (US 6,035,159).

Azuma et al. (...159) disclose an image forming apparatus comprising: a photosensitive member (7); a charging means (8) for charging the photosensitive member; an image forming means for forming an electrostatic image on the photosensitive member that has been charged by the charging means; a developing means (10) for developing the electrostatic image; transferring means for transferring the image developed by the developing means onto a recording material (col. 2, lines 64-67); a driving source (col. 6, lines 29-32); a driver for transmitting a driving force from the driving source to the photosensitive member (col. 7, lines 37-44); a first coupling portion (20) having a polygonal shape (col. 6, lines 11-17); a second coupling portion (22) having a hole portion (21) which has a cross-sectional configuration larger than the first coupling

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portion, the hole portion being engageable with the first coupling portion (col. 6, lines 9-28); and a center shaft (25) provided on the second coupling and penetrating the first coupling and rotatable integrally with the first and second coupling portions (col. 7, lines 25-32; col. 11, line 55 – col. 12, line 10; and figures 9-13); wherein the photosensitive member has the first coupling portion, and the driver has the second coupling portion as a driver (figures 9-13). The first coupling portion receives a driving force from the second coupling portion (col. 6, lines 29-36; and col. 7, lines 37-44). The photosensitive member is positioned correctly relative to the image forming apparatus using the center shaft (col. 8, line 30 – col. 9, line 17; and figures 9-13). The first coupling portion has a twisted projection having a polygonal cross-section (col. 6, lines 11-17). The hole portion of the second coupling portion has a twisted polygonal cross-section (col. 6, lines 17-22). The second coupling portion is movable in an axial direction of the center shaft, and is provided with an urging means (26) for urging the second coupling in the axial direction of the center shaft (figures 9-13). The photosensitive member (7) is part of a unit (B) including a process means actable on the photosensitive member, where the process means can be the charging means, the developing means and a cleaning means for cleaning the photosensitive member (col. 3, lines 12-20).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 4, 18 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al. (US 6,035,159) in view of Nagasue et al. (US 5,768,656).

Azuma et al. (...159) disclose the features mentioned previously, but do not disclose the center shaft having the claimed taper configuration. Nagasue et al. (...656) disclose a center shaft (36) having a taper configuration at the end portion (figures 2, 3, 5 and 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the center shaft have a taper configuration at the end since such a configuration for a center shaft is well known in the art, as disclosed by Nagasue et al. (...656).

8. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al. (US 6,035,159) in view of Yokoyama et al. (US 6,016,413).

Azuma et al. (...159) disclose the features mentioned previously, but do not disclose the transferring means is an intermediary transfer member. Yokoyama et al. (...413) disclose a transferring means that is an intermediary transfer member (figure 40). It would have been obvious to one of ordinary skill in the art at the time the invention was made for the transferring

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means to be an intermediary transfer member since it is well known in the art that a transferring means can be an intermediary one, as disclosed by Yokoyama et al. (...413).

Allowable Subject Matter

9. Claims 9-12 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 13, 23-28 and 40-45 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gonda (US 5,371,576) and Taniguchi et al. (US 6,011,942) disclose coupling portions and a center shaft.

Contacts \ Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is (703) 308-0725.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on (703) 308-1373. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431 or 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Sandra L. Brase
Primary Examiner
Art Unit 2852

October 18, 2002